

A N
E S S A Y
O N T H E
S M A L L P O X.
W I T H R E G A R D

- 1st, To its SPECIFICK CAUSE.
2^{dly}, To its True NATURE and ESSENCE.
3^{dly}, To the best METHODS of Curing it.

To which is Subjoin'd;

Reasonable REFLECTIONS and CONSIDERATIONS
on the modern Practice of INOCULATION.

In which the

Two Grand OBJECTIONS to that most Rational
and Salutary INSTITUTION, are examined and
refuted.

By CHARLES PERRY, M. D.

Libera per vacuum posui Vestigia, ———
Non aliena meo pressi Pedes. HOR.

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E R R A T A.

PAGE 3. Line 6. for *Pabeulum*, read
Pabulum.

Page 7. Line 26. for *Violation*, read *Violence*



A
BRIEF ESSAY
ON THE
SMALL POX.



Have observed, in what I have heretofore penn'd upon this Subject, that it is a Disease which is the Produce of every Country and Climate; and that is the Lot of almost every Person to have, who lives to an advanced Age. And further, I have shewn that it is not only very noisome, tedious, and dangerous in its Nature; but fatal also to great Numbers: And consequently it has employed the Pens, as well as the Practice, of many Physicians, of different Ages and Countries, in order to shape and direct its Cure, in such Manner as may render it most safe, easy, and effectual. It is the particular Consideration of the great Ravage and Havock that it has made, above a Year past, (and even at this Time continues to make) in this Town, and circumjacent

cumjacent Country, that determined me to recollect what I have heretofore said upon the Subject, and to add some new Thoughts and Conjectures to it.

The Small Pox is no other than a Fever of the putrid and eruptive Kind, and is placed (as it justly deserves) at the Head of that Class. But as for its first Cause or Origin (besides some other Particularities attending it) they will not perhaps, admit of so familiar and easy a Definition, as those of some other Distempers may.

Nevertheless, seeing it is always agreeable and is likewise a Thing expected from us that we endeavour to assign some first Cause or Origin, to the Disease we treat of; so I will endeavour to do it here, and that with all possible Brevity and Perspicuity; avoiding Mystery, on the one hand, and Superstition on the other. And, First,

I suppose that there exists, or that there is innate, in every human Body, a certain latent Principle, or certain latent Particles of Matter, which constitute the real first Cause or Origin of this Disease. 2. I presume that this latent Principle, or those Particles of Matter, (as they exist in divers Persons or Constitutions) are (according as they may happen to be more mature, ripe, and susceptible of Impregnation) apt to catch, or take Fire, upon the Access, or Approach of variolous Effluvia. 3. When the sup-

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posed latent Principle, or Particles of Matter, are once fired and agitated, they then instantly (after the Manner of Ferments, which communicate and multiply themselves *in Infinitum*, provided they meet with a suitable Pabulum) contaminate the whole Mass of the Person's Blood, and all the animal Juices. And hence, by transmuting, or changing the whole System of the animal Fluids into their own specific Nature and Essence, the whole Constitution becomes variolous; which, perhaps, but the Moment before Contagion, was perfectly sound and healthy.—So sudden is the Transition from a sound, to a sickly State!

That this is really the State of the Case, is, in my Opinion, evident to a Demonstration: For we have many Instances of Persons that never had the Small Pox, (such as tender affectionate Parents, or good-natured officious Relations) who have lain in Bed, perhaps, betwixt two Persons who were ill of it, and have thus continued through the whole Course of the Disease, without catching the Distemper; and yet some of those very Persons (who had so wonderfully escaped it) have taken it several Years after, only by seeing some one, who was just recover'd of it; or, perhaps, only upon hearing the Disease mentioned. And hence it may, I think be concluded, and taken for granted, that the supposed Principles, or

Partiêles of Matter, were immature, or unripe, and unapt for Impregnation, at the Time, or Times when they kept such a close Communication with the variolous Sick : And that, in after Times, the supposed Principles, or Particles of Matter, having acquired, or being arrived at a more perfect State of Maturity, they were then susceptible of Contact, or Contagion, upon the Approach, or Appearance of the variolous Fomes.

Moreover, there are many Instances of Persons who have lived to an advanced Age, who (though they have frequently visited, and communicated with the variolous Sick) never caught the Distemper. In such, therefore, we must suppose, that the original Stamina of the Disease never came to Maturity, so as to admit of Impregnation.

There is one Thing or Circumstance, belonging to this Distemper, which is very singular ; and would be proper and peculiar to itself, only that the Measles lays Claim to the same Prerogative and Immunity, which is this,--namely, that whosoever has once had the true Small Pox, is not liable to it, or susceptible of catching it a second Time. And this evidently proves, that the Stamina, or original Seeds of the Disease, are totally subdued and extinguished, or else are expelled, by the Fever : And that there is not

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the least Tincture of it left behind in the constitution.

Some Physicians are of Opinion, that the small Pox may be eluded, and its Access absolutely forestalled and prevented, by the use of Medicines calculated to kill and destroy its original Seeds, or *Stamina in Embrione*: Witness the late Dr. *Allen*, in his *Synopsis Medicinæ*. This, indeed, if practicable, would be a precious Gift, and a great consolation to Mankind.

There is yet another Set of Men, who conceit that Methods and Expedients may some Day be discovered, to kill this Disease (which is the same Thing as to cure it) in its febril State; and so prevent the Eruption of Pustules. And this (though it cannot arrogate an equal Claim to Merit, as the fore-mentioned Project) would, if practicable, be no bad Compromisement. But then (supposing this last Scheme practicable) the poor patient would always be in Doubt, whether the Disease, which he had been thus cured of, was really and truly a variolous Fever or not: That is, he would be in some Doubt, whether he was absolutely free from the future Insult of the same Disease, — or at least (however it might fare with the Patient in that Respect) the Physician who performed the Cure, might be in Doubt, or Dispute with himself: Because we meet with many Fevers, of the eruptive Kind, (besides

(besides the variolous) which nearly resemble in many of their Symptoms, the Fever that precedes the Small Pox. This Notion, however, (crude, indigested, and weak, as it may appear) has been favoured by some illustrious Votaries. Thus far of the Causes, or Causes, and of the Nature and Essence of this Disease.

The complex numerous Legend of Symptoms, incident to this Disease, (especially where a confluent Pock is, either in Embryo or in actual Being) are so generally known, or may be found to Exactness in so many Authors, that it is utterly unnecessary to cite them here : Therefore I will pass this Part over, in Silence ; and shall proceed to what is more material. Though, as I remember, there are some very extraordinary Circumstances of this Disease, in the most learned and ingenious Dr. *Freind's Exercitationes Medicæ* ; which he, (I think *Freind*) whilst a Prisoner in the Tower wrote, and inscribed to the great and celebrated Dr. *Mead* : But those Tracts, I have either lost, or mislaid, otherwise I should be inclined to add some of these Cases.

The original, or first Cause, of this Disease, has (as we hope) been rationally produced, and clearly delineated already. The second Cause (which comprehends, and expresses the very Essence of the Disease) results from the specific Action, and Exertion

the first Cause. And consequently this, though really and truly an Effect with respect to its own prior, or preceding Cause; yet it is as really and truly a Cause with respect to its Effects: And this consists in a Corruption and Putrefaction of the animal Juices. The Third, and last Cause (*or causa proxima*) consists in the specific Disposition, Determination, Action, and Irritation of the morbid Humours, or the variolous Fomes.

The Intentions of C U R E.

THE proper Indications, or Intentions of Cure, are manifestly these,—namely, 1. To break the Texture, and to destroy the viscid cohesive Quality of the morbid Matter. 2. To dissolve its intimate Union and Cohesion with the Blood, so that an easy, expeditious, and ample Separation may ensue: And as soon as that is performed and done, the Eruption immediately takes Place; unless obstructed, thwarted, and prevented, by Accident, or Ill-management. 3. The Eruption, and Maturation, of the Pustules, to be conducted, and carried on, gently, safely, and equably; and in such a Manner as may offer the least Disturbance, Offence, or Violation to Nature. The fourth Indication dictates, that we effectuate and complete the Crisis, by procuring a total Discharge of the variolous Matter by the Pustules, or Ulcers.

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In a Pock of the distinct Sort (even when they are very numerous) Nature is often the best Physician ; and acquits herself so well that it would be both improper, and impertinent to intermeddle : But in the confluent Sort, it is, generally speaking, quite otherwise for there Nature seems to be egregiously perplexed and confused, and stands in Need of constant and able Assistance.

Our greatest Care, Circumspection, Judgment, and Attention, are required, towards the just Management of the Fever, &c. through all the Stages of this Sort of Pock. For as that may casually be suffered, either to rise too high, or to sink too low ; so the Pustules will ebb or flow, rise or fall, proportionably.

Concerning this great, and important Point very different, and even opposite Notions have, of late Years, been broached, debated and maintained, amongst the Learned ; in so much that scarce any Age, or Country, has produced so many, and such contradictory Notions, concerning the right Management of this Disease, as are at this Day, and have been for several Years past, debated and practised amongst us.

The great Dr. *Sydenham* (our Countryman) was the first who (by a happy Sagacity, joined to good Learning, great Experience, and indefatigable Pains) introduced, practised and promulged the cool Regimen amongst

us. And he (who saw, and had experienced the Errors, and fatal Effects of the hot Regimen) was very excusable, if he ran a little too far into the contrary Extreme, (as a late ingenious Author observes by way of Apology for him): Not that I charge him with carrying it too far, (whatever others may have done since upon his Scheme) because he was a Person of too much Sagacity; and too diligent and accurate, in observing the Events of Things, to admit of that Supposition and Censure.

Indeed the Physicians of *France*, (to whom I most humbly make Apology, for not giving them the Preference, in mentioning them prior to those of this Nation) are altogether as variable, discordant, and preposterous, as we are, (perhaps yet more) in their Reasonings upon, and in their Methods of treating this Disease.---And indeed, to do them Justice, they are pretty much the same, with regard to all other Diseases. I could give a very solid Proof of what I here suppose of them, from an Abstract of their Methods of treating the late Plague (*A. D. 1721.*) at *Marseilles*; which was given me in Writing, by one of the chief Physicians then practising there.

Helvetius (a famed Physician of that Nation) has, in his Essay on the Animal Oeconomy, boldly dared to make a most egregious Sally out of the common Track, in

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the Methods he propounds for treating the Small Pox: But I will venture to pronounce upon it, that the Method which he has recommended, will be found no less repugnant to Truth, and right Reason, than it is contradictory to the Practice of the present and past Ages.

But alas ! for the French Nation,--I mean the Physicians of that Nation,--I never yet met with one in Conversation, nor scarce ever read a Book, that was penned and published by the Faculty of that Nation, (and there was scarce any Thing of Moment that escaped me, for many Years successively that considered and treated the Science of Physick in a philosophic Light. This Assertion (though very true) may appear paradoxical, perhaps, to such as have neither travelled, nor read much. Because it is most notorious, that the *French* Nation spare no Pains to cultivate and improve the *Belle Lettre*, and some other ornamental Branches of Science.

But in further Proof of what I assert of the medical Faculty in *France*, I will relate an Affair that fell under my own Cognizance.

In the Year 1735, when I was at *Rome* I casually came acquainted with a *Muscovite* Nobleman, (the Baron *de Teinkin*) who had been obliged to leave *France* (in common with all others of his Nation) upon the *Muscovite* Court's Resolution to assist the late

Emperor *Charles VI.* with 40,000 Auxiliaries. This Nobleman was much indisposed in his Health, as he had been for a good while before ; and (as he intimated to me) he went to *France*, more in Hopes of finding Relief for his Distemper, from the Physicians of *France*, than out of Curiosity to travel. But alas ! after he had consulted several of the most eminent Physicians there, and had swallowed down vast Quantities of Medicines, it proved all to no Purpose ; for he was not one Jot the better for them.

In fine, he desired my Opinion and Advice upon his Case ; and he previously put into my Hands, for Perusal, a long Series of Prescriptions, which he brought with him from *France*. And though this Gentleman's Distemper was neither more nor less than a confirm'd Hippo ; yet I found nothing in all those Prescriptions, but *Occ. Canc. Antim. Diaphoret. Sal. Prunella*, and such like Trash, with now and then a lenient Purge.

This Story naturally reminds me of another Affair, which quadrates with it pretty nearly, and equally tends to a collateral Proof of my Assertion. It is this :

About the Year 1726, being at *Spa* in *Germany*, I came casually in Company with another *Muscovite* Nobleman, (the Baron de *Vintinckhoff*) who had been several Years in *France*, in order to meet with a Cure, or some Help at least, for a total Blindness he

had laboured under, for the Space of nine Years. But, having consulted the most eminent Physicians there, and finding no Amendment, he was advised by his Physicians, to come down to *Spa* that Summer, to try the Success of these Waters: But neither did this avail him in the least

This Nobleman (being a tall, portly, graceful Person) scarce ever failed to have a Circle of Gentlemen and Ladies about him, at all publick Places, and upon all public Occasions. It happened one Morning (at *Gertronsfer*, which is about two Miles from *Spa*,) that I made one of the Circle: And the Baron expatiating (as usual) upon the deplorable Circumstance of his Blindness, and the Danger, or rather the Despair, he was under of ever meeting with a Cure, (seeing that the most eminent Physicians of *France* nor yet the *Spa* Water, had done him the least Service) I took an Occasion to offer my Opinion upon the Matter. The Baron listened attentively to what I said, and expressed a good deal of Satisfaction at my Way of accounting for his Disorder. That Conference however, passed over without any other Effect; only as it drew the Eyes, and (as I had some Reason to guess) the Approbation of the Company upon me. But it happened that, the next Day in the Evening the Baron, being in the Capuchin's Gardens was again circumscribed with a Circle of Ladies and Gentlemen, of which I was one

of the Constituents. The Baron no sooner heard my Voice, than he remembered or noticed it; and presently said; that (if not much mistaken) he had the Pleasure and Satisfaction to talk with me, on the Morning on the Day before, at *Garronster*, concerning the Distemper of his Eyes. — I answered him it was very true; that I had then the Honour to offer him my Sentiments upon that unhappy Subject. The Baron immediately opened again upon the same Topick; and he concluded by desiring I would allow him to send me the whole State of his Case, from the Beginning, in Writing, in order to have my Advice upon it: And accordingly he sent it to my Lodgings, by his Valet de Chambre, the next Morning by Six o'Clock. — I considered the Case maturely; and I return'd it at Four o'Clock that Afternoon, accompanied with an Explanation of it, and a Prescription.

After my Explanation of his Disorder had been read to him, — he immediately sent his Valet de Chambre to acquaint me that he, the Baron, would be glad to meet me about an Hour after, at the Capuchin's Gardens. — As I was going down thither, I accidentally espied the Baron in the Shop of Mr. *Saltpe-teur*, an eminent Apothecary there; where the Baron had called to order my Prescription to be made up. When I spoke to the Baron, he addressed me as if I had been his
good

good Genius. Few Words had passed betwixt us, before the Baron whispered his Valet de Chambre; who, thereupon, presented me with a noble Fee, wrapped up in Paper. Within a few Minutes after, came in an *English* Gentleman, one of the greatest Commoners of the Realm, (but whose Name I dare not presume to mention.) The Baron hearing his Voice cried, Who's there? Monsieur such a one? The Gentleman replied,—the very same, Monsieur *le Baron*: — Then the Baron told him, in *French*, to this Effect; namely, that he had had the good Fortune to meet with an *English* Physician there, who had accounted for, and explained his Distemper incomparably better than all the Wretches of Physicians whom he had been consulting for nine Years past. But I beg Pardon for this long Digression:—It does, I own it, smell rank, and putid of Egotism; the Thing I mortally hate: But they serve to corroborate and verify what I have said above of the Faculty in *France*; and therefore I could not help indulging my Fancy in the Recital of them.

It is a Notion, or Opinion, which I have long since held, and maintained, that where the Philosopher ends, the Philologer should begin; or rather, that when any one has made considerable Advances in the philosophic Sphere, he should then at least commence Philologer: And this—not according to the narrow

narrow

arrow and vulgar Sense of the Word ; but according to the more sublime, and extensive Definition given of it by some of the Ancients. But, on the contrary, (and to my great Surprize) I have met with many Persons of great Erudition, who had all the School Philosophy *ad Unguem*, and were, nevertheless, extremely void, and destitute, of a Point of Philology. But here I shall endeavour to explain the Cause, or Reason, of this great Error ; and perhaps I may be able to detect and expose it. I apprehend (and indeed am pretty sure I am in the Right) that many Physicians content themselves with having learned the *Leges Scriptæ*, or written Laws of Medicine, and retaining the same in Memory ; but that they never give themselves the Trouble to launch into the more spacious Field, and more arduous Research of the *Leges non Scriptæ*, or unwritten Laws of the Science. And it is these unwritten Laws which are the proper Objects of the Philologer's Contemplations and Pursuits.

I am (I own it) equally surpris'd and concerned, when I see many bright Men of the Faculty (who undertake the Cure of Diseases) so indolent, negligent, and unattentive, as to the Business of cultivating and improving their natural Knowledge.

But in order to illustrate, and more fully explain myself upon this Head, I think I cannot do better than to cite a Passage from my

my Dedication to the great and worthy *S*
Hans Sloane, which precedes the first Volume
 of my general Treatise on Diseases.

“ But nevertheless, when I infer, from in-
 “ disputable Reports, how many Gentlemen
 “ there are of the Faculty in *Britain*, who
 “ are justly celebrated, and conspicuous for
 “ their Learning, and other masterly Tal-
 “ ents, (as well natural as acquired) and
 “ likewise that there are, and have been
 “ for some Years past, extant with us, such
 “ Exemplars, and Monitors, as the Works
 “ of a *Mead*, a *Freind*, a *Morgan*, *Cheyne*,
 “ *Wainwright*, and *Arbuthnot*; to which
 “ must add those of *Pitcairn*, and *Keill*,
 “ *Tentamina Medico-Physica*: I say, when
 “ I seriously reflect on these Things, I am
 “ astonished that so necessary and impor-
 “ tant a Design (*i. e.* of rendering Physic
 “ truly a Science) is not yet further advanc-
 “ ed; and that a general System, or Codex
 “ has not been compiled; accounting for
 “ and explaining the whole Catalogue of
 “ Diseases, with all their most common and
 “ notable Phænomena, in a rational or phi-
 “ losophical Light: For it is by that Means,
 “ and that only, that People can be led and
 “ instructed to have a just and adequate No-
 “ tion of Things.

“ The Invalidity of Theories, as they
 “ now stand, and the Insufficiency of the
 “ most diligent and accurate Observation

“ added

added to them, appear daily in numerous Instances: And if the current Theories of Phyfic were to be as arbitrary and despotic as the common Law, without doubt they would, in many Cases, be just as iniquitous and pernicious: That is, those would be as destructive to People's Lives and Healths, as these (if uncontrouled) would be to their Properties. And hence I infer, that it is just as requisite, that a Court of Reason should be instituted, to curb and meliorate the established Theories of Phyfic, as it is for a Court of Equity to check and controul the common Law.

“ The Parallel I have here drawn, betwixt the present State of Phyfic, (or rather its *Leges Scriptæ*) and the common Law, will (if maturely weighed and considered) appear to be perfectly just: For it is no more possible, that any Theory, or Theories of Phyfic, should take in, and provide for, all the Phænomena that do, or for the future may, present in the various Diseases, and the divers Subjects in which they are or may be reposed, than it is for any System of Laws, (whether founded on Statutes, or Precedents) to provide for all the various Circumstances which may present in that Sphere: So that it is highly necessary, there should be an Appeal to Reason in one Sphere, as

“ well as the other : But though the Law
 “ determines that Authority in a single Per
 “ son, yet Physic requires it to be lodged
 “ in every individual Member of the Fa
 “ culty.”

If the Gentlemen, in general, of the Faculty, would make the most, and the best use of their Learning, and other Accomplishments, they should direct and apply them to the Culture and Improvement of their rational Powers and Faculties; that so they may become expert, and apt, at solving all the Phænomena of Nature ; of which the Diseases incident to the human Body are a Part. It was to these, and such like noble Ends and Purposes, that the greatest Men of latter Ages, directed their Learning and Studies. Witness the Lord *Bacon*, Mr. *Boyle*, Mr. *Locke*, and Sir *Isaac Newton* : Men ! whose Names will be held in Veneration to remotest Ages ; and who will be a lasting Ornament and Honour to the *British* Nation.

I have, from Time to Time, converse with a good many Physicians (of our own Nation, I mean) who seem very fond of the cool Regimen, in its utmost Extent ; and of keeping the Bodies of their variolous Patients always lax and open. These Gentlemen thunder out Anathemas against all Cordials and Alexipharmicks ; and even the mildest Diaphoreticks are censured and stigmatised by them ; unless it be that any extraordinary

Circumstance requires them: And in Place of those antiquated, exploded Methods and Medicines, they constantly entertain their various Patients with cooling refreshing Liquors, *e. g.* with Tamarind Drinks, and such like; (throwing in, now and then, some *Manna* and *Sal Nitri*; or perhaps *Sal Prunella*). And by these, and such like Methods, our modern Champions for the cool regimen, pretend to cure every one, without Exception, whom they take in Hand.

This immoderate Extension of the cool regimen, in treating the Small Pox, is (as must be acknowledged) a flat Contradiction of two Axioms in Physick, which are looked upon as eternal and immutable. But how improbable, and how incredible soever, the boasted Success of so very cool a Regimen may appear to physical and philosophical Reasoning; yet I am clear in it, and sure of it, that some few Persons have done very well under it: But then these (fortunate) Persons may, perhaps, be *raræ Aves in terris*.—Having thus barely touched upon the Dissentions, and different Opinions amongst the Learned, concerning the best and most salutary Method of treating this disease,—I will leave them to themselves, and hasten to deliver my own Sentiments upon the Matter. But before I proceed, I will take Leave (in Opposition to these very inguine, and zealous Champions for the

cool Regimen) to mention one of the Axioms alluded to above; which is (being interpreted) that wherever Nature manifestly intends, and endeavours, to promote, and bring on any one Crisis, it is then not only preposterous, but repugnant to the most plain and persuaſive Reasoning, to attempt thwarting her, or diverting her from her own Course: And though many bad, and fatal Conſequences, have ſometimes attended the over hot Regimen; yet I dare ſay, that thoſe who rigorouſly proſecute the other Extreme, will be found (upon a nice and impartial Scrutiny) to have abundantly verified the old *Latin Proverb*, *Incidit in Scyllam, qui vult vitare Charybdim*. Virgil. And perhaps they may incur the Cenſure of *Horace* into the Bargain, where he ſays, *Stulti dum vitia fugiunt, in contraria currunt*.

It would be very right and proper to obſerve a Medium, as well in our Treatment of this Diſeaſe, as in other Things. I am entirely for the cool and temperate Regimen, in Contradiſtion to its Oppoſite, a hot Regimen. Cooling Things, as well in the Articles of Diet and Cloths, as in that of Medicine and gentle Laxatives, ſometimes, are undoubtedly neceſſary and expedient, in order to reſreſs inordinate Ferments, or Ebullitions; and to check the too rapid and exalted Momentum of the Blood, &c. But then let them be uſed occaſionally, and judiciously

ally ; and not generally and promiscu-
fly.

The various Indications, or Intentions of
cure, having been specified above, it is now
time that we consider on the properest Ways
and Means to execute them.

Bleeding (which is now very generally
practised amongst us, where the Small Pox
is expected, and even when it has just made
its Appearance) is the first Thing necessary
to be done ; and ought to precede every
other Thing else ; and more especially if the Pa-
tient be of a robust plethoric Habit. In such
Constitutions it ought to be practised in large
Quantities, v. g. to 20, 25, or 30 Ounces.
But I very much question if the Benefits and
Advantages of copious Bleedings, under the
first Attacks of this Disease, are as well dis-
cern'd and understood, as they are generally
practised ; and therefore I will endeavour to
set these Things in as clear a Light as I can,
or perhaps as they will admit of : And first,
I assert that the Fever which precedes, and
for some Time at least accompanies the Small
Pox of the confluent Sort, is as strictly and tru-
ly inflammatory, as any Fever whatever : Tho',
consequently and eventually it becomes of the
putrid Kind. 2dly, When any one is seized with
a variolous Fever (especially such a one as pre-
cedes a bad Sort of Pock) the Blood and
animal Juices are immediately thrown into
a violent Ferment or Ebullition ; and conse-
quently

quently the Blood Vessels will become immoderately overstretched or distended. Now—whenever this happens in a plethoric Habit, the Symptoms are in Proportion more grievous and the Danger greater: And therefore copious Bleeding under such Circumstances, is the more necessary, as 'tis scarce possible that due and salutary Separation should be made and the Eruption well and duly effectuated without it. But whether the variolous Patient be under a high Plethora or not,—when the Blood-Vessels are emptied a little, and their Distentions redressed by Bleeding—then every Change that is proposed to be wrought upon the Blood and Humours is by far more easily and expeditiously effected, than it would or could be without that Premissary: And further, the necessary Change being once wrought upon the morbid variolous Humours,—these will more readily and easily detach, and separate themselves from the Mass of Blood after Bleeding than otherwise; and consequently Nature's plain Intention of thrusting them off at the Superficies of the Body, will be more easily and happily accomplished.

Besides the mention'd Advantages, Bleeding (seasonably and duly performed) may prevent the Access of many direful Symptoms, which are incident to such as have the confluent Sort of Pock, through all its various Stages or Periods. Moreover, it is
very

very reasonable to suppose (what I believe is very often true in Fact) that where Bleeding has been omitted, in a variolous Fever of high Malignity;—such, for Example, as is the common Harbinger or Precursor of the confluent Pock, and more especially if the Patient was of a plethorick Habit; there the Blood and Humours are in such a tumultuous confused State, that the whole Habit, or (if you please) the Disease itself, is perfectly suffocated, by the Want of it; and consequently, the Separation being thus frustrated and supplanted, the Patient is carried off the Stage in the febril State, before any Eruption appeared to distinguish its particular Genus.

I have been the more copious and diffuse (endeavouring at the same Time to be as clear and explicit as possible) upon this Head, that the Faculty, (some of them, at least) as well as the Laity, may be induced to learn to reason well; and to acquire a Facility and Aptitude to account for, and explain the various Diseases which may come under their Cognizance: For I have met with many Physicians, who (though otherwise Men of Sense and Learning) were extremely deficient in this Particular: And, on this Account, it may truly be said of the Faculty of Physick, at this Time, as it was heretofore said of the sacred Mission, or perhaps of the whole Christian Community,—
that

that many indeed were called, but few were chosen.

Whenever a Fever appears, which, from its Nature and Symptoms, denounces the Small Pox to be impendent, I advise Bleeding copiously, either in the Arm or in the Foot; but rather in the latter: And this I advise to every one indiscriminately, without Regard to Age, Sex, or Temperament.

The next Thing in course, is to give a Vomit; for which Purpose I advise the following: —

Recipe *Terræ foliatæ Tartari Drach. ij. dissolv. in Unc. i. Aq. Menthæ; cui adde Oxyomel. Scillit. Unc. i. vini Emetici, vel Tincturæ Epacacumæcæ Drach. iv. ad. Drach. vi. f. Potio, sumenda post Phlebotomiam.*

This Medicine is evidently calculated to cleanse and empty the whole alimentary Tube, for it will purge as well vomit; and besides, it will (in some measure) attenuate and resolve, and will consequently promote the Separation of the morbid Matter from the Blood and animal Juices: In fine, I am of Opinion that this Emetic (which perhaps is the first of the kind that ever was thought of) will be found on Experience very proper and good upon this Occasion: And after the Vomit is over, and the Patient's Stomach somewhat settled, the following may be good in its Place.

Recipe

Recipe *Pulv. Pept. Drach. i. Pulv. Purpurei Drach. fs. Lapidis Hybernici levigat. Scrup. i. Syr. Sambuci. Drach. vi. Aq. Paralyseos Unc. i. Laud. Liquid. Sydenhami. Gutt. xx. f. Haustus Hora dormiendi sumendus.*

In a Pock of the distinct Sort, and in such is approaching to the confluent Sort,---or even in such as is absolutely confluent,---proceed Matters go on regularly, easily, and usually, I apprehend little more need be done, than to repeat that Medicine every night; only varying the Dose of the Laudatum occasionally. However the following easy Process (which will be found very mild, benign, and amicable) may aid and assist to very good Purpose and Effect.

Recipe *Lact. Sulph. Drach. ij. Pulv. Pept. Bateani Drach. i fs. Lapidis Hybernici Drach. i. Sacch. Saturni Drach. fs. f. Pulvis, in Chart. vi. dividendus, & quartâ quâque horâ sumendas, cum Cochlear. iv. Julap. seq.*

Recipe *Aq. Papav. Errat. Unc. xij. Syr. de Althæa Unc. ij. Sp. Nitri Dulc. Drach. ij. f. Julapium.*

Recipe *Decocti ad Syrupum de Althæa (cum Unc. i. Florum Papav. Errat. incoct.) lbij. Syr. Capill. ven Unc. ij. Sp. Nitri Dulc. Drach. ij. f. Apozema, cujus bibat pro Potu ordinario.*

Or the Patient may drink, now and then for a Change, a small Sack Whey made of equal Parts, Milk and Water, with *Flore Calendulæ*, & *Papav. Errat.* boiled in it.

The Food, or Diet, necessary in these Cases, should consist chiefly of Seeds, Legumens, and Things of the farinaceous Kind.

I cannot omit to observe here, that a very ingenious and worthy Gentlewoman of my Acquaintance communicated to me a Medicine, which (as she said) had been found, by Experience, to be excellent for the Small Pox. It is as follows, *viz.*

Recipe Stercoris ovini Unc. iv. Croci opt. Coccinilæ ana Drach. i. contundantur simul in mortario, cui adde, sensim, Vini Canarini lbij. Cola atque exprime pro usu; cujus detur Unc. ij. pro Dosi, sæpius in Die.

But though I have given this a Place, amongst other Things, I do not, I own it, pay any great Deference to it, nor place any great Confidence in it.

I mentioned it occasionally, some time ago, to a Person of this Town, (a Retainer to the Craft) who made a short (but very pertinent and judicious) Comment upon it,—in these, or the like Words : — That Medicine (said he) will only promote what we want to prevent,—which is the Produce and Growth of

of Putrefaction. I cannot help owning, that the Remark made upon it, considered *prima Facie* only, seems very ingenious and judicious. But then I very much question if it can stand the Test of a nice Scrutiny : And therefore I will take it under my Inspection and Examination ; and this I rather do, because I find it is a Dogma, a Tenet, or Notion, (call it which you please) pretty generally held and maintained, that all Alkaline Matters are highly improper, and very pernicious in the Small Pox.——Which Notion, if not refuted or restrained, may possibly prove detrimental and destructive in many Instances.

Before I proceed, I shall observe, that ever since the Errors of the hot Regimen were detected and exposed,---and the high Advantages of its Opposite (the cool Regimen) have been discovered and promulged,---the more sanguine Advocates for the latter have loaded, branded, and stigmatized the former with very heavy Censures and Reproaches. And as it is the Nature and Property of all Alkaline Matters, to heat, rarefy, attenuate, and resolve;——so those, in Consequence, fall under Censure and Condemnation here.

It is most notorious, that all the grosser Excrements of Animals, (such as the Dung and Urine) and all the abstracted Liquids, (such as the Bile, Pancreatic Juice, &c.) abound with an Alkaline Salt, which has

some Degree of Volatility : And therefore say they, such Matters, as they manifestly abound with an Alkaline Salt, must necessarily promote and produce Putrefaction :--The very Thing which we want to prevent or destroy. *Ergo*,—Those Matters, and all such like, must be highly improper and pernicious in the Small Pox.

It would seem also, (to judge of Things only superficially) that Alkaline Salts, whether fixed, or volatile, should be equally bad in Quincies, Pleurifies, and all other inflammatory Diseases; (though the contrary is proved by large Experience) as they dispose the animal Juices to Putrefaction.

But it is, on the contrary, plain Matter of Fact, that it is in such a Change, wrought upon the morbid Matter, that the Cure of those Diseases chiefly consists: For when once the viscid fizy Juices, which were stagnant in the capillary Vessels, are either so far attenuated and resolved, as to pass forward in the ordinary Course of Circulation; or otherwise, when the same are putrefied and rotted, or, in other Words, are duly and perfectly concocted, — then the Pain and Inflammation cease: And why may not the like happen by the same Means, in the Small Pox, where the morbid Matter is manifestly of a very tenacious viscid fizy Nature?

Nothing is more obvious and manifest than that the variolous Fever is of an inflammatory

Nature, as has been said above: For (according to *Sydenham*) each individual Pustule is a distinct Abscess; and, according to some other modern Authors (of no small Fame) they are so many distinct Ulcers, discharging a concocted purulent Matter. Therefore this Crisis of the Disease must be the Aim and End of all our Endeavours,--as it is indispensably necessary (or at least highly necessary) to the Patient's well-doing: But then (for says *Horace*,—*Est modus in Rebus, sunt certi denique Fines, — Quos ultra, citrave nequit consistere rectum*) it ought to be pursued and prosecuted with great Sagacity, Caution, and Circumspection, and in the most gentle, easy, and equable Manner. And therefore I propose, and lay it down for a certain invariable Rule or Maxim,---that the Intentions of stimulating, irritating, and agitating the morbid Humours by Medicines,—be never prior nor superior to the Intentions of digesting, concocting, maturing, and putrefying the same. For (otherwise) should the first mention'd Intentions be pursued and prosecuted prior and superior to the latter, very dismal and fatal Symptoms may ensue,---which it may not be in the Power of Medicine to correct or subdue. And indeed this Rule or Axiom ought to be observ'd in treating all other Fevers, more especially those of the malignant Class or Kind.

What

What I have said above is, I fancy, sufficient to shew that the mention'd Arguments and Reasonings (which, when consider'd only superficially, appear so specious and orthodox) are, when examin'd to the Bottom, very light and frothy : But here I must put a Period to this Episode, — or what do you call it ; though I am encumber'd with such a Flux or Torrent of Ideas upon the Subject, that I could dwell upon it for a long Time yet ;—but my Purposes and Promises of Brevity admonish me to conclude upon that Head.—Upon the whole, it may, perhaps, seem that I am rather against than for the Article which I have undertaken to defend and support ; but it is not so in Fact, for I really think 'tis a very good Medicine, and may be applied to a very good Purpose and Effect, under the Cautions, Restrictions, and Limitations above-mention'd ; that is, by precluding it, and associating with it, proper Demulscents, Obtundents, &c. For Medicines of those Kinds and Qualities, preceding and accompanying the Use of Cordials, Alexipharmicks, Volatiles, or any other alkaline Matters, must necessarily (if we may credit the plain Law and Voice of Reason) prevent that Irritation and consequent Agitation which would otherwise result from them. And should we run the Parallel to other Cases and Circumstances,—the same Rule, or Axiom, will hold good : For in Pleurifies,

Perip-

Peripneumonies, or any other inflammatory Disease, — alkaline, heating, and irritating Medicines would infallibly exasperate the Symptoms, unless curbed and restrained by Obtundents, Demulscents, &c.

Here I resume the Thread of my Discourse, which has submitted to a long (though I hope it won't be thought impertinent) Interruption.

The distinct Sort of Small Pox rarely exhibits any dismal and dangerous Symptoms; such as Deliriums, Frenzies, Comas, Subfulminant's, the Petechiæ, bloody Urine, &c. (tho' this Sort is not always and absolutely free from Danger) and therefore it is needless to give a long Catalogue of Remedies, or to offer many different Processes, when I may venture to promise an easy, happy, and effectual Cure, from a proper and due Use of the above-mention'd:—But if any unexpected Accident or Symptom should arise which may indicate the Necessity of Blisters, an emollient Glisten, a lenitive cooling Purge, or Cordials, Volatiles and Alexipharmicks; — let them then be recurr'd to, — and used indeed; — but always discretionally and judicially.

Let the temperate Regimen be always laid down as a Basis, — and especially with regard to Air, Fires, Bed Clothes, and such like; for *Phæbus's* Advice to his Son *Phaeton*, (*medio tutissimus ibis*) is no where more strictly

strictly applicable and pertinent than heretofore. And if it should appear necessary at any Time, to force Sweats, (because it is always proper gently to indulge them) it were much safer and better to do it by proper Medicine and a copious Use of warm diluting Liquors, than by a huge Heap of Bed-Clothes and large Fires.

The Reasonableness and Justice of this Distinction must, I think, appear plain and obvious to every one: For when gentle Sweats are excited by proper Medicine joined with Plenty of warm diluting Liquors, the morbid Matter is, at the same Time, corrected, meliorated, and mollified;---or else digested, concocted, and putrefied;---and so is adapted and prepared to pass off by the Way or Means intended by Nature: Whereas when Sweats are forced and rais'd by large Fires, and huge Heaps of Bed Clothes, — the Blood and Humours will be violently heated and agitated, without any other Change being wrought upon them, and hence Deliriums, Frenzies, Subsultus, Petechiæ or Purples, bloody Urine, and other Hæmorrhages, may arise.

But as for the Method directed above, which will, I flatter myself, be found very proper and good for all Degrees of the distinct Sort of Pock, — so I apprehend it will be found good and useful in the confluent Sort.

It must be owned that this latter Sort of small Pox, (*i. e.* the confluent Sort) affords very spacious Field for Speculation and Conjecture:—The Symptoms to which (as it may be repored in different Subjects) it is incident, are very various and numerous; yet the Symptoms, though numerous, are not determined, nor indeed are they determinable; because new Symptoms, and such as were never noticed before, may arise at any Time; but the Brevity and Precision which I have proposed to myself in this small Tract, will not allow me to recite even the particular known Symptoms, and much less to comment and explain upon them as I have done elsewhere.

The Violence of the Fever which precedes, and for some Time accompanies this Sort of Pox, and the Number of Pustules which manifest themselves upon the Eruption, serve to specify the Quantity of morbid Matter;—but it is from the Number and Nature of the concomitant Symptoms, that we can judge and conclude of its Quality.

I have indeed professedly renounced giving so much as a bare Recital of the numerous Tribe of Symptoms incident to this Sort of Pox, and much more to give a mechanical Explanation or Solution of each Particular;—nevertheless I must not omit to mention the Sore Throat and Ptyalism (troublesome Symptoms, which are almost inseparable from this

Sort of Pock in Adults) which I should very glad to find out effectual Ways and Means of relieving. —

But ere I proceed, it will be proper (by way) that I undertake to dissect and dissect those Symptoms: I presume then, that the Symptoms (as they happen to Adults upon the confluent Small Pox) must result from a critical and extraordinary Tendency, or a termination of the morbid Matter upon the Salival and other Glands of the Throat, caused doubtless by Nature's Inability to throw off her incumbent Load upon the Surface of the Body in due Time and Quantity.

However those Symptoms (tho' troublesome and grievous enough) are no other than as dangerous than as the Spitting may happen to be suppress'd or check'd, or as there may be too great a Conflux of Matter to be readily discharged;—in which Cases the Event is often Suffocation and present Death;—but on the contrary, the Spitting is free, easy, and copious, it is very beneficial.

It has been found by Experience that oil, lubricating Linctus's, and other Medicines of the like Nature and Tendency, are inadequate and insufficient to answer the Demands of those Symptoms;—for those Things though they do facilitate the Discharge (or Expectoration) of the incumbent Matter, yet they may (as they very probably do)

cau.

cause and promote at some Time, a more copious Afflux of Matter to the Throat, &c.

It is for these Symptoms in particular (if other Circumstances of the Disease would admit of it) that I advise the following Method — of Purging.

Recipe Mercurii Alkalyzati (ex part. ij. Calcis Jovis, et part i. argentivi vi) Scrup. ij. Calomel. Gr. x. conf. malvæ q. s. f. Bolus sumendus hora dormiendi, & proximo mane capiat Potionem seq.

Recipe Tartar. regenerat. Drach. iij. Mannæ Elect. — Unc. i. dissolvent. in Unc. ij. aq. Flor. Pavav. Errat. et f. Potio.

But in case such a Method as this is resolved on, it should be repeated every Day, or at furthest every other Day—if the Violence of the Symptoms requires it, and other Circumstances will admit of it.

But for further Use at proper Intervals ;—that is, on the intermediate Days, if the above are only taken every second Day,—or else from Noon till Night, if the Purge is taken every Day—I recommend (submitting to the Judgment of the learned and sagacious Physician) the following.

Recipe Viper. pp. Test. ovor. calcinat. ana Drach. ij. Millep. ppt. Drach i. Sacch. Saturni. Drach. ss. f. Pulvis, in Chart. vi. distribuendus, & quarta quaque hora sumend.

It may be truly and justly said of this Medicine, — *Quod atterit attenuat, resolvit, et atque Humorū Præcipitationem per urinam ciet.*

I dare say nothing of that Kind was ever practised, or so much as thought of before for those Symptoms; nevertheless I humbly conceive that it will be look'd upon as a rational and probable Remedy, and especially assisted with the following Apozem.

Recipe Rad. Sarsæ, Rad. Chinæ, Rad. Eryngii, Rad. Satyrii ana Unc. Rad. Hellenii, Rad. Iridis, ana Drach. i. Herb. Hederæ Terrestr. Scabiosæ, Capivi ven. ana Mss. coquantur in s. q. Aq. fonscolæ ad colat. lb. ij. cui adde Oxymel. Scillæ & Oxymel. Simp. ana Unc. i. ss. Symplicis Nitri Dulcis Drach. ij. f. Apozema cujus detur Unc. iv. cum quolibet Pulvere, & ad Libitum.

Blisters in these Cases have been found of great Benefit; as also Cataplasms, of an emollient, resolvent, and discutient Nature, applied to the Throat: Or,

Recipe Æthiop. Min. Drach. iij. Pulvis Pept. Drach. ij. Viper pp. Drach. i. ss. f. Pulvis, in Chart. vi. sumendas quartâ quaque horâ cum decocto præscripto.

The great Art and Secret in such Cases, is to make the incumbent Matter pass off easily and freely

freely, and copiously; and at the same Time to resist and prevent the Afflux of fresh Matter.

Doubtless the great Difficulties and Distresses, which People sometimes labour under from those Symptoms, may proceed from a Tumifaction of the Oesophagus, and from the abundance of Sloughs, and other Filth, within it,—which almost choak it up; sometimes absolutely so: But in such Cases the following Gargarism, forcibly injected, with a large Syringe, may rescue a Person from impending Death.

Recipe *Fung. Sambuci* Unc. i. *Sem. Sinap. Rad. Raphan. Syl. ana* Unc. ss. *Rad. Pyreth. Drach. ij. coquantur in* ℥. q. *aq. Papav. Errat. ad colat* lbj. *cui adde* *Sal. Polychrest. Drach. iij. Oxym. Scillit. Unc. ij. f. Gargarisma.*

If a Diarrhæa should happen, it may be suffered for one Day at least, especially if the Fever and other Symptoms are relieved by it: And such good Effects from a Looseness are by no Means impossible. For if it is true (what some confidently assert) that the variolous Matter may be precipitated, and carried off by the Glands of the Intestines and Kidneys, by means of Purging, and diuretic Medicines; — then, in Parity of Reason, we may suppose that Nature is capable of setting them off spontaneously by those

those Conduits. But if, notwithstanding the Looseness, there is no Remission, or Abatement of the Fever and other Symptoms; ---- then it ought by all Means to be curbed and moderated:-----To which End balsamic astringent Glisters, injected every Morning and Evening, and Things of the like Qualities given by the Mouth, will generally answer.

But the highest Pitch of physical Knowledge, and human Sagacity, will be very much perplexed and embarrassed, and will be at a great Loss how to act to Advantage, where many of those Symptoms, which are expressive of the highest Malignity, present at one and the same Time. ----- E. G. Where Deliriums, Frenzies, Comas, Subfultus's, the Petechiæ, or Purples, Bloody Urine, or other Hæmorrhages, appear in the same Subject, and at the same Time: For some of these mentioned Symptoms exhibit quite opposite Indications, and require a quite different Treatment. Blisters are avowedly very proper and good to take off a Coma, and relieve the Subfultus; and of this Reason, as well as Experience, testifies for them:-----They are likewise found good (by Experience) to rescue from a Delirium or a Frenzy. — Though (to consider Things *prima Facie* only) they seem directly contrary to the Intentions which present under these Symptoms and Circumstances.-----But

as to the bloody Urine, or other Hæmorrhages, — and the Petechiæ, or Purple Spots, — the plain Voice of Reason cries aloud, that they must rather increase than lessen those Symptoms. In like manner, or for the same Reason, it should seem Madness, or Infatuation, to prescribe the stronger Cordials, Alexipharmicks, or Volatiles, under such Circumstances; when, on the contrary, Obtundents, Demulscents, cooling Emulsions, and cooling Catharticks, seem to be expressly indicated, and eminently required. — Of such a Process, therefore, I will give a Specimen, — leaving it to the skilful Physician to chuse or refuse, to alter or mend them, as he thinks convenient.

Recipe Tart. Solub. Drach. vi. Crystall. Mineral. Pulv. Peptici Batean. ana Drach. iij. Tart. Vitriolat. Drach. i. Pulpæ Cassiæ, Pulpæ Tamarind. ana Drach. vi. f. Electuarium, cujus Cap. Æger. Quant. N. M. quarta quaque hora.

Recipe Rad. Althææ, Eryngii, Graminis, Aspergi, ana Unc. i. Rad. Iridis, Enulæ Camp. ana Unc. fs. Flor. Papav. Errat. Unc. i. Flor. quatuor Cordial. ana Drach. iij. coquantur in f. q. Aquæ Font. ad lbij. Colat. & cum Amygd. Dulc. & Sem. Papav. Alb. ana Unc. ij. f. Emulso, cujus bibat copiose.

Pro-

Processus alter.

Recipe *Cinnab. Nat. Viper. pp. ana*
Drach. iij. Mummiæ Mineralis, vel (in
Ejus defectu) Mummiæ Balsam. &
Pulv. Peptici, ana Drach. ij. Lap
Hybern. Drach. i.

Sacch. Saturni, Drach. ss f. Pulvis in
Chart. ix sexta quaque hora sumendas
& horis Intermediis Cap. Dosis. Electu-
arii Cathart. præsc. cum Emulsione.

I think that the plain Voice of Reason speaks greatly in favour of this last Process, and especially of the two Processes taken alternately, or interchangeably.

When a second Fever happens, (a Thing very common in this Sort of Pock) after the Turn of the Pustules, — 'tis plain, in that Case, that Nature, with all her Auxiliaries, was unable effectually to thrust off the morbid Matter the proper Way; — that is, at the Superficies of the Body: — Consequently some Part of it recoils upon the Constitution, or is resorbed by the Blood-Vessels, and stirs up a new Fever. Now it appears in my Judgment, (how repugnant soever it may be to the Sentiments and Practice of others) that it would be intirely vain and fruitless, to endeavour any more at the Expulsion, or Discharge of the morbid Matter, at the Superficies of the Body, some other Way or Means, than ought to be attempted;

tempted ; by which we may either correct and subdue the remaining Matter, so as to render it offenceless in the Body ; or else to expel, or discharge it, by some other Secretion or Excretion.

To answer those necessary Ends and Purposes, fundry Methods present themselves in the narrow Sphere of my Judgment) as Candidates ; and perhaps each of them, respectively, may lay a Claim to the Preference. And, first, a gentle Salivation, or a light Ptyalismus, raised by small Doses of Calomel, repeated every six or eight Hours with gentle Catharticks interspersed now and then to check and confine it) may, perhaps, arrogate the high Style or Title of sovereign or Supreme.

And, in Truth, I have known some Instances of Persons who have been happily rescued from the Danger of this second Fever, by Salivations raised, not purposely, but by Accident or Mistake, perhaps. Secondly,—Mercurials may be joined with Alterants and Catharticks, so as to elude the Effect of pitting, and may yet prove of very happy effect. Thirdly,——Alterants, joined with powerful Resolvents, and absorbent drying Decoctions, may possibly answer the Purpose. Fourthly,—Alterants, associated with mild Catharticks, and some rich Cordials, to support languishing Nature) may answer

our Purpose very well. Fifthly, and lastly
Alterants with Cordials and Digestives.

To answer the first proposed Scheme,
advise as follows. *V. G.*

*Imprimis, detur Enema Emolliens, ac per
rum stimulan—& postea Potionem seq.*

*Recipe Mannæ Elect. Unc. i. Tart. reg
nerat. Drach. ij. Sal. Mirab. Drach.
dissolventur in Unc. 2. Aq. Rosa
Pallidar. & postea adde Elix. Salu
Unc. i. f. Potio, sumenda post operati
nem Enematis.*

*Recipe Gum. Sagapæni Elect. Drach.
Calomelanos, Extracti Croci ana Drach.
Contundantur in Massam, pro Pillu
xxx. Quarum Cap. iij. sexta quaq
hora.*

If the Spitting should come on too hastily
or rise too high, omit the Use of the Pills
every second or third Day, and give the
above purging Potion in the Place of them.

To execute the second Scheme,
*Recipe Mercurii Alkalyzat. (ex part. ij. Cal
cis Jovis, & part. i. argenti vivi a
purati) Drach. iij. Antibeet. Poter
Viper. pp. ana Unc. fs. Tartar. reg
nerati Unc. i. Cons. Flor. Borag. Unc.
Syr. Cichor. q. s. f. Elect. Cujus Ca
℞. N. M. quarta quaque hora.*

For the third Method,

Recipe *Æthiop. Antimonialis, Antikect. Poterii, Gum. Guaiaci Viperi pp. ana Drach. ij. Sacch. Rosat. Drach. i. f. Pulvis, in Chart xii. quarta quaque hora sumendas; superbibendo haustum largiosum Apozematis seq.*

Recipe *Rad. Scorzonæ. Rad. Sarsæ, Rad. Chinæ, Rad. Eryngii, Rad. Satyrii, ana Unc. i. Uvar. Passul. Unc. iij. Ras. Eboris, Ras. Corn Cervi. ana Drach iij. Croci Drach. i. Santall. omnium, ana Unc. fs. coq; in f. q. Aq. Font. ad Colat. lbijj. Cujus bibat pro Potu ordinario.*

The fourth Process.

Recipe *Tartar. regenerat. Drach. vi. Viper. pp. Drach. iv. Antikect. Poterii Bezoardi Jovialis, Granorum Chermes ana Drach. ij. Ligni Aloes, Spicæ Nard. Ind. ana Drach. i. f. Pulvis in Chart. xii. quarta quaque hora sumendas, cum Cochlear. 4 Julap. sequentis.*

Recipe *Aq. Cinnamom Tenuioris Unc. xij. Elix. Salutis, Syr. Flor. Persicar. ana Unc. fs. Tinct. Rad. Serpentarii, Tinct. Rad. Hellenii ana Drach. iij. misce.*

To answer the last Scheme, I propose as follows:

Recipe *Viper. pp. Drach. iv. Test. calc. ovor, pp. Ant. Poterii, Bezoard. Jovialis Pulv.*

*Pulv. Peptici, ana Drach. ij. Croci i.
 Gran. Chermes, Sacch. Rosat. ana Drach.
 i. f. Pulvis, in Chart. xii. quarta quaque
 hora sumendas cum Julapio supra præ-
 scripto.*

Before I dismiss this Subject, I should not omit to remark, that under a certain perilous Circumstance of this Disease, a Method has of late Years been essay'd with Success, which perhaps preceding Ages never thought of much less ventured to put in Practice; that is,—when, upon the Pustules sinking, the morbid Matter determines itself inwardly upon the Viscera and Intestines, — causing great Sickness, Anxiety, Gripes, Reachings, Faintness, &c. and all those without a Diarrhæa accompanying; — in such Cases, and under such Circumstances, strong irritating Glister have been applied in order to solicit the morbid Matter, and brisk Catharticks to precipitate the same by the intestinal Glands (supporting the Patient in the Interim with strong Cordials) and by such Practice (as a certain Author says) Numbers have been rescued from impending Death.

This specifies a great deal concerning the Usefulness of strong Glisters and brisk Catharticks, under such like Circumstances of the Disease, particularly as to the Times and Occasions of using them; and it proves that they may be given upon certain proper Oc-
 casions

tions, not only with Safety, but with Success likewise :—And surely under the mention'd Circumstances, when Nature is evidently too weak and feeble, any longer to support and prosecute her intended Work ;—she ought then to be assisted and relieved by the reasonable Application of such Things, as may solicit and discharge the incumbent load of Matter some Way or other ;—and to those Purposes, the copious Use of Blisters and Issues, or rather Seatons, may contribute great deal :—But here I will put a Period to my Reflections and Disquisitions upon the small Pox, (considered as natural and accidental ;) having already stretched them considerably beyond the Limits of Brevity which was proposed,--and now I shall hasten to consider it in another Light,—that is,—as præternatural and procured.

I shall here be readily understood to mean inoculation, --- concerning which ('ere I proceed) I shall briefly remark, that 'tis, in my judgment, no small Blessing to Mankind, that under the terrible Dread and Apprehensions which many who have not yet had the small Pox continually labour) this new (as to us) Practice of Inoculation steps in to their Relief and Comfort.

Seasonable

Seasonable Considerations and Reflections upon
INOCULATION.

UNDER this Head I shall consider the mentioned Subject on every Side, and in every Light perhaps that it will admit of—and I hope to shew (plainly and clearly) that the Practice of Inoculation is consistent with Religion, Reason, good Sense, and common Prudence: And lastly, that it is in some measure, necessary to the Preservation of human Kind, as also to the Ease, Comfort, and Happiness thereof.

The Practice of Inoculating, though but of late Years introduced amongst us, and though hitherto it is not an establish'd Thing but is only approved and practis'd by particular Parties and Sets of People;—yet it brought with it from *Turky* (the Country whence we received it) a high Sanction and Authority: For though the *Turks* don't practise it at least but very seldom among themselves—yet amongst the *Armenians*, the *Georgians*, the *Mingrelians*, and the *Circassians*, as also amongst the *Greeks*,—it has been of general Use from Time immemorial; at least from so remote a Time that I could never justly and rightly learn when or in what *Æra* the Practice of it commenced, or was first introduced and instituted.

I know very well that many Pieces have been penn'd and publish'd (*pro* and *con*) upon this

this Subject, several of which I have read; but as these are all of them now out of my Hands, and are absolutely forgot by me; so I must leave them entirely out of the Question, and shall proceed to deliver my own private Sentiments upon the Matter.

As to the specific Operation — called Inoculation, — I never had (I own it) any Experience or Concern in it; because as I have never had the Small Pox, (tho' I have heretofore attended many variolous Patients, of such as were disposed to give me a proper Equivalent for the Danger I exposed myself to) so I never performed nor so much as assisted at the Operation; otherwise (from the many Debates and Conversations which I have had upon the Subject during my Travels in *Turkey*, with Persons perfectly well versed and practised in it) I might presume to assert myself as well qualified for it as any Person in the Realm. However the Operation (which is very easy in itself) is very well understood by many, and is pretty shrewdly guess'd at by myself; and it is with no small Pleasure I observe that the Wisdom and Prudence of many People in this County, have engaged them readily to embrace it.

About six or eight Months ago *Dr. Had-dow* of *Warwick* introduced it, and practised it upon many Persons (as I am told) in and about *Warwick*; and I am well informed that very lately *Mr. Edward Jorden*, an ingenious

nious Apothecary and Surgeon of this Town, has inoculated several Persons in and about this Town, and has conducted the Business in each (for so I am assur'd) with very happy Success:—I am likewise told that the very ingenious and worthy Dr. *Harvey* of *Stourbridge*, has very lately introduced and cultivated this salutary Doctrine and Practice; so that I am in great Hopes of seeing it make a rapid Progress and Fortune amongst us. I thought myself obliged thus to make particular Mention of those Persons who have introduced and practised Inoculation amongst us here;—that is, Dr. *Haddow*, Dr. *Harvey*, and Mr. *Edward Jorden*,—not only in Justice to their respective Merits in the Case, but also with the Hope that it may instruct, influence, and induce all Persons who have not yet had the Small Pox, to embrace and submit to so easy, so safe, and so rational a Practice.

I have, as above observed, read several Pieces *pro* and *con* upon Inoculation, and I have been a Party in many Debates and Controversies upon the same Subject; and when I sum up the Arguments on both Sides, (as well ideal and speculative, as real and written) and bring their respective Products in Balance together, —I find myself obliged to give my Voice and Vote in favour of Inoculation.

But though this salutary Practice of Inoculation is indeed generally approved by all reasonable

reasonable considerate People, (yet I am sorry I have Room and Reason to say it) it is not universally subscribed to, even by Persons of solid Sense, good Reason, and sober Reflection : What therefore, (to put a Question) can this Division or Dissention amongst Mankind upon so obvious an Affair result or proceed from ? Why (to make answer to the supposed Question) I plainly see that it is made a Party Affair ; I mean of a religious Nature : For the Dissenters, and others who go under the Denomination and Distinction of Whigs, almost universally approve it, and many of them practise it ;—whereas those who are on the other Side the Question, (I mean in religious Matters) generally disapprove and condemn it ; nevertheless Inoculation will always (I'll vouch for it) support its Credit and Reputation in the Opinion, Estimation, and Judgment of all impartial unprejudiced dispassionate Persons ; and the Preference it lays claim to, will, I fancy, appear incontestible from the following short Estimate of Matters.

First, it is universally maintained and allowed, that not above one Person of a considerable Number (suppose a Dozen) lives to an advanced Age without catching the Small Pox, — I mean in the natural Way, unless it was eluded by a timely Inoculation. Secondly,—upon an accurate, impartial, and faithful Estimate, it appears (at an Average)

that at least one sixth Part dies of it, of such as take the Disease in the natural Way.—These Premises being granted (which are not to be denied or disapproved, I fancy) it follows that near one sixth Part of the Community (who are not otherwise carried off before they arrive at an advanced Age) die of this Disease in the natural Way.

Now let us look into the State of the Case, as it generally happens and governs under the Practice of Inoculation.

It is positively asserted and maintained by the Advocates for Inoculation, (and I must take it for Truth, as I never heard it denied or even disputed by the opposite Party) that at this Time, not above one in an Hundred dies of the Small Pox by Inoculation (though about twelve or fifteen Years ago the Estimate was one in fifty, or one in forty-eight at most) and hence it appears plain (could no other Reasons against it, or Objections to it be exhibited) that Inoculation is incomparably the most safe, easy, eligible Way of Proceeding; but (besides this visible and incontestible Advantage) should all Mankind espouse and Practice this Method, every one doubtless would have their Children, Kindred, and Friends, inoculated within that Period of Life called Childhood,—before they could reasonably be supposed to have contracted any ill Habit, with Regard to the Blood and animal Juices: And what would be

be the necessary Consequence of this?—Why all those who had undergone, and happily passed through this Operation, would for the Time to come be perfectly free of that Terror, Dread, and Apprehension, which so constantly haunt most Persons who never had the Distemper.

But before I proceed further, 'tis both just and proper that I bring under my Inspection and Examination the two grand and most important Objections to it:—And first, the Theologists (some of them at least) assert, that the Practice of Inoculation is unchristian and impious; that it is a tempting and provoking of the Almighty; that it is an insult and Usurpation on his divine Prerogative; that it is thwarting his Designs and Purposes; and is really and truly taking his proper Work (that of inflicting Diseases) out of his Hands:—But these (though specious Arguments and Objections) are what I fancy the thorough-paced rigid Predestinarian will scarcely subscribe to.

The second Objection against it (which is urged by some minute Philosophers, and some minute Physicians too, perhaps) is this; namely, that possibly, and perhaps, and so forth,—the latent invisible Seeds of some ill Habit or chronical Disease (such *E. G.* as the scorbutic, the Scrophulous, the Strumous, the Cancerous, the Leprous, the Gouty, the Nephritic, and what not) might exist in

the Blood of the Person from whom the inoculating Matter was taken; and that (*datis atque permiffis*) the fupposed latent vifible Seeds might be transplanted together with the variolous Matter into the Blood of the Person inoculated: — And laftly, that thereafter the fupposed Seeds might fructify, multiply, and increafe, fo far as to manifeft the fame corrupt vicious Habit in the Subject inoculated, as was innate, or at leaft latent and concealed in the Blood of the Person from whom the inoculating Matter was taken.

Now as to the firft Objection, — taken from all its Parts or Branches, — this is a Thing rather prefumed than proved; — for what I revolve in my Mind, and attentively furvey the whole, --- the diffufe Sphere of Religion (as well natural as revealed) I can't find in it, nor deduce from the whole, any thing that amounts to an Inhibition of this Practice.

As the firft Law and exprefs Voice of God was to increafe and multiply, --- fo the firft Law and Dictate of Nature is Self-Prefervation; --- now by this Law and Dictate of Nature, we are not to underftand barely and fimplly our Exiftence here; but (fubordinate to that) it alfo bids us provide to live fociably, eafily, and comfortably: --- To all which Ends and Purpofes the Practice of Inoculation is a very great Accessary or Means. This laft Pofition is a felf-evident Truth, and therefore ftands in need of no Arguments

Reason.

Reasonings to support and confirm it ; and further,—as for the abstracted Idea, or Notion of Inoculation,——I apprehend that it is altogether as reasonable to suppose that the Almighty, the All-gracious, and All-merciful Being did either actually inspire Mankind with it, or else excite it in Mankind, for its own Preservation, --- as that it occurred to us spontaneously ; or, in other Words, that it was a Child of mere human Invention and Caprice : So that the Thing called Inoculation may perhaps boast a supernal Pedigree, — That is, it may be in fact a Thing of divine Institution, or at least may result from a divine Impulse, and not be a fordid Thing of mere human Conceit.—— But to suppose and admit the contrary,—is it not manifest that we bleed, we purge, and take many other Medicines in order to preserve Health, and prevent the Access of Diseases ?—The Practice of Inoculation was instituted and prosecuted to answer the like Ends and Purposes.—Observe the industrious Bee, and the indefatigable Ant,—they labour, they toil, and undergo Hardships during the Summer Season,—only to provide against the Inclemencies and Necessities of the Winter.

Plain Reason and common Policy instruct us, rather to incur or undergo a slight Evil and Danger which we might avoid, than to run the Risk of a much greater, which perhaps we cannot escape ; and to this invariable

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Maxim it is that Inoculation (considered as of human Invention) appeals for its Justification. But though the preceeding Objection is Theological and Metaphysical, yet the following Objection is strictly Physical, and therefore I may probably be the better qualified to dissect and display it. To that now I proceed, in which I'll endeavour to be as brief and concise (taking care to be at the same time clear and explicit) as possible. And first,

That the Stamina or Seeds of a Pox, a Scurvy, a Scrophula, or of any other of the Diseases above enumerated, or indeed of almost any other chronical Disease, may be innate, or latent, in the Constitution of the Person from whom the Matter for Inoculation is taken, — so far is very possible:—And further, —that some small Portion, or Part, of the supposed latent Seeds. or Stamina, may be taken, together with the Matter for Inoculation, and transplanted into the Blood of the Subject inoculated; —that is also very probable;—But what may reasonably be supposed to be the Consequence of all this?—Why, verily, nothing at all,—nor is it possible, humanly speaking, that any Thing should result from it.

For (First) we are to consider that these foreign Seeds, or Principles, (supposed to be thus transplanted) are so extremely small (I mean in Quantity) as to be of no comparative Weight or Force, and consequently, it is by far

far more reasonable to suppose, that they will be vanquished, and, as it were, annihilated, by the Force of the Constitution, (or the Animal Powers) into which they are received, than that they should recover, or acquire Power and Force enough to wage War upon it, and reduce it under their Tyranny and Subjection.

Secondly,—It is very probable, and indeed almost certain, that the whole Bulk of the supposed latent Seeds, (which Bulk is infinitely small) are so wrought upon, during the whole Progress of the Disease, by the variolous Fever, (which both precedes and accompanies the Distemper) either by dividing and comminuting their Substances, or else by digesting and contacting them, as greatly to enervate and weaken their Force, if not entirely destroy their Essence.

But the Reasonableness and Probability of this Conjecture, will obtain yet a further Sanction, Authority and Force,——if we only reflect on what is most obvious to daily Experience and Observation: Namely,——that many Persons, who (before they had the Small Pox in a natural Way) were Valetudinary, Weak, and Sickly, have nevertheless become Healthy, Robust, and Strong, upon their having pass'd through that Disease;—and this, I think, plainly intimates, or rather proves, that the supposed valetudinary Persons were, before they had the Small Pox, incumbered and distressed, and kept weak and sickly, by Means

Means of some latent (though invisible) in the Habit; — and that upon the Access of the Small Pox, the supposed latent Seeds, or morbid Stamina, were intirely vanquished, destroyed, and exterminated in common with the variolous *Fomes* or Principle.

Moreover, I cannot omit to observe further, that the supposed latent Seeds, or morbid *Stamina*, (upon which this grand Objection is founded) are always subjected to two different Trials, or are exposed to the Torture twice at least; and therefore if the first should not perfectly meliorate and correct them, or not kill and destroy their noxious Qualities, — yet their being immediately subjected to the same Torture a second Time, will, in moral Certainty, compleatly effect it. — For, first, the variolous Matter design'd for Inoculation, is not taken out of the Pustules 'till they are arrived at a State of Maturity, or nearly so; therefore any foreign (though latent) Seeds, or Stamina of other Diseases, that were transplanted together with the variolous Matter, must necessarily be much weakened and enfeebled, if not entirely vanquished and subdued; and then these same latent Seeds or Stamina are destined to go through the whole Process again, in the Constitution, or Habit of the Person into which they are thus transplanted; — so that here they cannot fail to be deprived, and to be even divested of Existence: And thus I think (and I hope it will appear so to every candid, impartial,

impartial and unprejudiced Person) that this ridiculous Objection is entirely defeated.

Upon the whole, — if I had ever so many Friends and Kindred, (of such as had never had the Small Pox) whose Lives and Happiness I was anxious and solicitous to preserve, I would advise all, and every one of them, to be inoculated ;—for it is only submitting to a very light (though certain) Inconveniency, and an inconsiderable Risque, in order to evade a much greater (though certain one) of both Sorts.

The great Benefits and Advantages of Inoculation consist in these two Articles ; first, in the previous Management, or Preparation of the Person's Body who is to be inoculated, with Regard to Diet as well as Medicine ; and secondly, in having the Matter for Inoculation taken from one who has a very mild and favourable Sort of Pock : And in Consequence of these prudent Cautions, (and I hope No-body would be so infatuated, and so blind to their own Interest and Safety, as to be inoculated without being duly prepared for it) every one (almost universally) who is inoculated has a mild and favourable Pock ; in fine, the above-mention'd Benefits and Advantages that attend the Practice of Inoculation, when prudently conducted, are obvious to every one, and are avowed by every Body. Now to bring Inoculation in Contrast with the natural or spontaneous Small Pox ;—the Dif-

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ference will not only be very obvious, but very great also; for 'tis most notorious that every one who takes the Small Pox in the natural Way, is in great Danger of his Life:—By the inexorable Malice of this deadly Tyrant, Parents are often deprived of those invaluable Blessings, their Children; and Children, *vice versa*, of their dear, tender, and indulgent Parents; Husbands of their Wives, and Wives of their Husbands: But of such as escape with Life, — what Miseries and Calamities are not many of them subject to, even under the Progress of the Disease, besides those that follow it? How many fair and blooming Faces (amongst the Sex) have been deflowered and deprived by it?—How many Persons have lost their Eyes (some one, other both) by it? And of this (as I am told) we have had some recent and sad Instances.

I (for my own Part) am so thoroughly persuaded and satisfied of the superior Advantages of Inoculation, (as to the Ease and Safety attending that Method) provided, as above observed, the Subject's Body is well and duly prepared for it, that I would stand the Chance of it myself for a very inconsiderable Gratuity. And I further declare, that if any Person who was disposed to be inoculated should come and consult me concerning the necessary Preparation of his Body, and would submit to the Methods I would direct (which would not be grievous in the least)

would

would, in such a Case, wager more than an hundred to one that he got well through it.

I have, in Compliance with the old physical Axiom, as well as in Obedience to the Dictates of plain Reason, been always a Champion for Inoculation ; of which I have given a Specification under my Hand almost twelve Years ago, — in my *General Treatise of Diseases* ; — though it is not seven Years since that Work appeared in Publick ; but in that Work I only express'd myself concerning it in a more loose and vague Manner, tho' I have there treated the Small Pox (in its general Acceptation) in a pretty copious and diffuse Manner. But what induced and determined me at this Juncture to write upon the Small Pox, (separate and apart from any thing else) was the attentive Observation I have always made in Person, as well as upon the Intelligence I have received, of its making dismal Ravage and Havock both in Town and Country ; and this ultimately determin'd me to offer the Publick the best Lights and Methods of Treatment which my Reason and Experience suggest to me for the Cure of the spontaneous Small Pox ; but more especially to recommend and enforce the salutary Practice of Inoculation. And to this (I frankly own it) the Advances which have lately been made in that laudable Practice and Pursuit, have been a seasonable Admonition to me.

This

This Practice of Inoculation is not only a Blessing and a Benefit to Individuals, and to particular Communities and Societies; — but 'tis also a Benefit to the State: — For 'tis most certain, that if it was universally practised throughout the King's Dominions, the Lives of many Thousands of his Majesty's Subjects would annually be preserved by it.

But if, after all, the specific Manner of giving the Distemper, by Incision or Inoculation, should be objected to, — there is yet another Method (less exceptionable perhaps) which has been sometimes practised with Effect; though it cannot perhaps be altogether so much depended on. This is by causing a Subject (whose Body has been previously and duly prepared) first to bathe his Hands, rubbing them together at the same Time in hot Water; and then immediately whilst warm, to rub the *Pus*, newly taken from a diseased Person, forcibly betwixt the Palms of his Hands. — This Method has, as above observed, sometimes communicated the Infection; and I fancy would seldom fail of answering, provided due Care was taken, — first, to relax the cutaneous Pores, by bathing and strong Friction in hot Water; and immediately after, in rubbing the variolous Matter forcibly upon the Part it is applied to, or betwixt the Palms of the Hands.

I cannot omit to observe, that having been lately at *Oxford*, and in several Parts of that County, I find that Inoculation has been very lately practised upon a great many Persons in many Parts of the County (though the University has not declared in its Favour) with most surprising Success.

F I N I S.



I cannot say to what use the money was put
 but it was used in some way or other
 and I am sure that the money was
 used in some way or other
 and I am sure that the money was
 used in some way or other
 and I am sure that the money was
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